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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,352	09/28/2001	Ben Herbert	5268-000001	3891

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EXAMINER

OLSEN, KAJ K

ART UNIT PAPER NUMBER

1753

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

# Office Action Summary

Application No.

09/966,352

Applicant(s)

HERBERT, BEN

Examiner

Kaj Olsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 8, 11-16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hochstrasser (USP 5,773,645) in view of Mandle et al (USP 3,773,646). Mandle is being cited for the first time with this office action. Its use here was necessitated by the amendment to the claims.
3. The claims were previously anticipated or rendered obvious by the teaching of Hochstrasser (see previous office action). Applicant has amended the independent claims to specify that the cover means is gas impermeable. Mandle teaches in an alternate sealing structure for an electrophoresis gel that the cover placed over the gel should be air tight (i.e. gas impermeable) to prevent degradation of the gel during storage. See col. 11, line 53 through col. 12, line 28. It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Mandle and make the cover film of Hochstrasser gas impermeable so as to prevent degradation of the gel and improve its storage life.
4. With respect to amended claims 20 and 21 (those limitations not covered above and in the previous office action), the fluid retaining space of Hochstrasser is clearly capable of retaining non-electrically conducting liquid. See col. 5, lines 37-46.

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5. Claims 9, 10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hochstrasser in view of Mandle as applied to claims 8 and 14 above, and in further view of Tocci (USP 3,715,295).

6. With respect to claims 9, 10, 17 and 18, Hochstrasser and Mandle disclosed all the limitations of the claims, but did not disclose the use of metal foils for the thin film. Tocci discloses in an alternate electrophoretic device that metal foils can also be utilized to seal an electrophoretic gel prior to use (col. 3, lines 1-7). It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Tocci for the apparatus of Hochstrasser and Mandle because both plastic and metal films are art recognized equivalent means for sealing a gel before use, and the substitution of one known sealing means for another requires only routine skill in the art.

7. With respect to claim 19, both Tocci, Hochstrasser, and Mandle all teach the use of plastic films. Although these references do not explicitly disclose electrically conducting plastics, the main purpose of the plastics in each reference is to provide a seal for the gel strip (see Tocci, col. 3, lines 1-7; see Hochstrasser, col. 4, lines 44-50; see Mandle, col. 11, line 52 through col. 12, line 17). It would have been obvious to one of ordinary skill in the art to utilize electrically conductive plastic foils (as long as that conductive plastic provides the desired sealing characteristic) because the substitution of one known material for another requires only routine skill in the art.

***Allowable Subject Matter***

8. Claims 1-7 are allowed for the reasons set forth in the previous office action.

***Response to Arguments***

9. In view of the amendments to the claims and drawings, all previous claim and drawing objections and claim rejections under 35 U.S.C. 112 have been withdrawn.

10. Applicant's arguments filed on 10-29-2003 have been fully considered. A number of the arguments are moot in view of the new grounds of rejection that was necessitated by the applicant's amendment. However, the examiner will address those arguments that were not rendered moot by the new teaching.

11. Applicant traverses the examiner's combination of the teachings of Hochstrasser and Tocci. In particular, applicant urges that neither Hochstrasser nor Tocci is drawn to the sealing of a gel. First, the examiner is confused by the applicant's inclusion of Hochstrasser in this assertion. Hochstrasser clearly teaches the use of sealing a gel (see col. 2, lines 29-40). How could this film of Hochstrasser be construed as reading away from the sealing of the gel? If applicant means "sealing a gel" as shorthand for a *gas impermeable* seal of the gel, this issue is addressed by the new teaching of Mandle, but the broader worded assertion that Hochstrasser doesn't teach sealing of the gel is clearly incorrect. With respect to Tocci, applicant appears to be alluding to the fact that Tocci is drawn to the sealing of the buffer solution. This is correct, but applicant is ignoring that this passage is referring to an embodiment where the buffer solution is already intermixed with the gel. See the three paragraphs that precede col. 3, lines 1-7 and note Tocci's explicit reference to the latter embodiment at col. 3, line 1. When Tocci is setting forth the sealing of the buffer in col. 3, line 1-7, Tocci is sealing both the buffer and the

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support medium (i.e. the gel). Hence the applicant is also incorrect that Tocci is not drawn to the sealing of a gel as well.

12. Applicant also urges that the examiner has not established a *prima facie* case of obviousness with respect to the use of electrically conductive films. However, applicant's traversal merely consists of a reassertion of the passage of a Tocci that does not recite the use the electrically conductive films. The examiner had admitted as much in the previous office action (paragraph 22 of the non-final office action and paragraph 7 of this office action) and the rejection was not over what Tocci or Hochstrasser explicitly stated, but what one possessing ordinary skill in the art would recognize in view of the teaching of Tocci and Hochstrasser. Applicant does not appear to have either invented electrically conductive plastics nor have they appeared to have derived any unexpected result when the plastic happens to be electrically conductive.

13. The remaining arguments appear to be based on the failure of Hochstrasser to teach a gas impermeable film. These arguments are moot in view of teaching of Mandle.

### *Conclusion*

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (571) 272-1344. The examiner can normally be reached on Monday through Thursday from 7:00 AM-4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached at (571) 272-1342.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of this application. This will expedite processing of your papers. The fax number for all official communications is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (571) 272-1300.



Kaj K. Olsen  
Primary Examiner  
AU 1753  
January 21, 2004